Theralase® - Healing at the Speed of Light®
The Next Generation Treatment for Non-Muscle Invasive Bladder Cancer
Forward Looking Statements

Certain statements contained or incorporated in this presentation, which deal with the financial condition and operating results of Theralase Technologies Inc. ("Theralase" or the "Company"), include information, analyses and projections as to future corporate developments which are currently in the planning stage and reflect the current expectations of management of the Company’s future growth, results of operations, performance, business prospects and opportunities. Such forward-looking statements, made with special reference to the Company’s ongoing technologically complex healthcare and medical device research and development efforts, which may include in-house and independent preclinical and clinical studies, testing new medical technologies and their applications, involve known and unknown risks and uncertainties that could cause actual events and/or results to differ materially from those estimated and/or anticipated and which may have been implied and/or expressed in such forward-looking statements. No conclusions as to the successful outcome of the ongoing and planned research and development projects in which the Company is involved are intended or implied nor can they be foreseen or predicted prior to definitive corporate announcements as to their outcome. Any statements that refer to expectations, projections, other characterizations of future events or circumstances are forward-looking statements. Although Theralase believes that the expectations reflected in any forward-looking statements made in this presentation are reasonable, such statements are based on a number of assumptions which may prove to be incorrect; including, but not limited to assumptions related to the risks and factors set out in the Company’s Annual Information Form, available on SEDAR under the Company’s profile at www.sedar.com. Accordingly, no assurances can be given that any of the events or circumstances contemplated by any such forward-looking statements will transpire or occur or, if any of them transpire or occur, what impact they will have on Theralase’s results of operations or financial condition.

Furthermore, the forward-looking statements contained in this presentation are made as of the date hereof. The Company does not undertake any obligation to update publicly or to revise any of the included forward-looking statements, whether as a result of new information, future events, or otherwise, unless required by applicable laws. The forward-looking statements contained in this presentation are expressly qualified by this cautionary statement.
Problem: Non-Muscle Invasive Bladder Cancer ("NMIBC")

Progressive and highly recurrent neoplastic disorder, which includes:  

- Carcinoma In-Situ ("CIS") – very early, high grade cancer; cells located only in the innermost layer of the bladder lining
- Ta, T1 – Papillary cancer located in the inner layers of the bladder lining and protruding from the bladder wall
- T2, T3, T4 – Papillary cancer has grown into the muscle wall beneath the bladder lining and is now referred to as Muscle Invasive Bladder Cancer ("MIBC")
- "Standard of Care" treatment for NMIBC is a Trans-Urethral Resection of the Bladder Tumour ("TURBT") procedure followed by a series of intravesical instillations of Bacillus Calmette Guerin ("BCG")
- Approximately 30% BCG-Unresponsive failure rate per year
- "Standard of Care" treatment for BCG-Unresponsive patients is cystectomy (bladder removal), but some patients are either unfit for cystectomy or desire bladder-preserving therapies, rejecting cystectomy

FDA has provided guidance on the design of a NMIBC clinical study for a BCG-Unresponsive population under **BCG-Unresponsive Nonmuscle Invasive Bladder Cancer: Developing Drugs and Biologics for Treatment - Guidance for Industry**, in February 2018. 

1 Bladder Cancer – Cancer Research UK
Theralase’s Study Drug, TLD-1433, is a Photo Dynamic Compound ("PDC") that is soluble and stable in water for at least 72 hours.

- TLD-1433 is able to bind with endogenous transferrin, a human glycoprotein.
- Combined molecule is able to localize to cancer cells, which have more transferrin receptors versus healthy cells.
- Combined molecule is laser light activated and destroys cancer cells through the production of singlet oxygen and/or reactive oxygen species.
- Patented technology (7 issued patents, 34 patents pending in US, Canada and internationally).

References:

3 Theralase Scientific Research – 2015
4 Theralase Scientific Research – 2015
7 Theoretical Exploration of Type I/Type II Dual Photoreactivity of Promising Ru(II) Dyads for PDT Approach. Marta Erminia Alberto et al, DOI:10.1021/acs.inorgchem.6b01782 Inorg. Chem. 2016, 55, 11185–11192
9 See Annual Information Form on www.sedar.com for additional details
**Solution: Study Device: TLC-3200**

- Study Device ("TLC-3200") emits green laser light (525 nm) through Laser Emitter and monitored by Laser Detector to deliver laser light energy to the bladder wall
- Laser Emitter and Laser Detector positioned in the bladder allows the surgeon to control and monitor the laser energy delivered to the bladder wall

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**Preparing the Laser Emitter and Laser Detector**

**Testing the Laser Emitter**

**Photo Dynamic Therapy Treatment Procedure**
**Solution: PDT Treatment Procedure**

- Study Drug reconstituted in pharmacy up to 24 hours prior to treatment procedure
- Catheter inserted through urethra and Study Drug instilled intravesically into bladder for approximately 60 minutes
- Patient taken to operating room, where patient undergoes general anesthetic and bladder voided
- Cystoscope inserted through urethra into bladder
- Bladder rinsed with sterile water via cystoscope to remove excess PDC
- Bladder distended using instillation of sterile water to prevent folds that prevent uniform light illumination
- Laser Emitter and Laser Detector inserted through working channel of cystoscope and positioned in bladder with the aid of diagnostic ultrasound
- Bladder illuminated with low level green laser light to ensure placement and then full power initiated
- TLC-3200 measures light delivery in real time, allowing for treatment interruptions (i.e.: bladder irrigations, fiber positioning) while ensuring that the laser light dose delivered to the bladder is approximately 90 J/cm²

**Clinical Data collected by Princess Margaret Cancer Centre, University Health Network from Phase Ib NMIBC Clinical Study, 2017-2018**

**Human Bladder Post Rinse Showing TLD-1433 Localized to Bladder Cancer Tumours**

Preferential accumulation of Study Drug in the NMIBC tumour regions of the bladder wall post wash

Transferrin receptors were not detected on normal urothelium. Positive staining was found to increase with increasing pathological grade and stage of the tumours

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10 Clinical Data collected by Princess Margaret Cancer Centre, University Health Network from Phase Ib NMIBC Clinical Study, 2017-2018
11 Phase Ib NMIBC Clinical Study patient cystoscopy photograph, after instillation of Study Drug, prior to TLC-3200 Light Activation
Bladder Cancer is the 10th Most Common Cancer Worldwide

Bladder cancer is the sixth most commonly occurring cancer in men and the 17th most commonly occurring cancer in women. There were almost 550,000 new cases in 2018 worldwide.

Estimates for Bladder Cancer:

- **United States**: Approximately 81,190 new cases of bladder cancer annually
- **Canada**: Approximately 8,900 new cases of bladder cancer annually
- **Europe**: Approximately 151,000 new cases of bladder cancer annually
- **Total (Canada, United States and Europe)**: Approximately 241,090 new cases of bladder cancer annually

Approximately 70% of all new cases of bladder cancer are classified as NMIBC.

Standard of care for patients with High-Grade NMIBC remains intravesical Bacillus Calmette-Guérin (“BCG”) following Trans Urethral Resection of the Bladder Tumour (“TURBT”). Unfortunately, up to 75% will develop tumor recurrence and 20% will progress within 5 years despite intravesical therapy.

Approximately 30% of these NMIBC patients treated with standard of care (TURBT and BCG) become BCG-Unresponsive.

Assuming 50% of BCG-Unresponsive patients choose radical cystectomy, this leaves 50% of these patients, who are unfit for cystectomy or desire bladder-preserving therapies.

**Target Market Potential Population Size (Canada, United States and Europe)** = 241,090 x 70% x 30% x 50% = 25,314 patients with BCG-Unresponsive NMIBC annually, who are unfit for cystectomy or desire bladder-preserving therapies.

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14 Key Statistics for Bladder Cancer – American Cancer Society (2018)
15 Canadian Cancer Society (2017)
16 Bladder Cancer Incidence Statistics – Cancer Research UK
18 Developments in the Management of BCG-Unresponsive NMIBC, Mohit Gupta, MD and Trinity J. Bivalacqua, MD, PhD, May 17, 2018
Market Opportunity

Potential of **25,314** patients (Canada, United States and Europe) with BCG-Unresponsive NMIBC annually, who are unfit for cystectomy or desire bladder-preserving therapies

Willingness to Pay for One (1) Quality Adjusted Life Year in the United States is $USD 50,000 to $USD 150,000

**Average Cost: $USD 100,000**

25,314 patients annually x $USD 100,000 per patient = **$USD 2.53 billion**

Bladder cancer market size will increase to over $1.1 billion in US, France, Germany, Italy, Spain, United Kingdom and Japan by 2025

**Target Market Potential** is estimated between $1.1 billion to $USD 2.53 billion annually

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21 Bladder cancer market size to more than triple to over $1.1 billion by 2025, April 19, 2017, GlobalData Healthcare
<table>
<thead>
<tr>
<th>Drug</th>
<th>Efficacy (CR = 30% at 12 months)</th>
<th>Safety (Adverse Events (&quot;AEs&quot;) (&gt; 2))</th>
<th>Cost &lt; $USD 200,000</th>
<th>FDA Approval Status</th>
<th>Pivotal Clinical Study Completed</th>
<th>Viable Treatment Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doxorubicin / Epirubicin</td>
<td>Complete Response (&quot;CR&quot;) = 35% at 14 to 31 days</td>
<td>Yes</td>
<td>Unknown</td>
<td>Approved / Not used in clinical practice</td>
<td>2007</td>
<td>No</td>
</tr>
<tr>
<td>Gemcitabine and Cisplatin</td>
<td>10% CR at 12 months</td>
<td>Yes</td>
<td>Unknown</td>
<td>Approved / Not used in clinical practice</td>
<td>2011</td>
<td>No</td>
</tr>
<tr>
<td>Mitomycin</td>
<td>CR = 31% at 6 months</td>
<td>Yes</td>
<td>$USD 4,000</td>
<td>Approved / Not used in clinical practice</td>
<td>2012</td>
<td>No</td>
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<tr>
<td>Thiotepa</td>
<td>CR = 52% at 4.2 months</td>
<td>Yes</td>
<td>Unknown</td>
<td>Approved / Not used in clinical practice</td>
<td>2014</td>
<td>No</td>
</tr>
<tr>
<td>Mycobacterium phlei cell wall-nucleic acid complex (&quot;MCNA&quot;)</td>
<td>Disease Free Survival (&quot;DFS&quot;) = 26.5% at 12 months</td>
<td>Yes</td>
<td>Unknown</td>
<td>Not Approved</td>
<td>2015</td>
<td>No</td>
</tr>
<tr>
<td>Valrubicin</td>
<td>10 to 13% CR at 12 months</td>
<td>Yes</td>
<td>Unknown</td>
<td>Approved / Not used in clinical practice</td>
<td>2017</td>
<td>No</td>
</tr>
<tr>
<td>Oncolytic adenovirus (CG0070 virus)</td>
<td>27% CR at 12 months</td>
<td>No</td>
<td>Unknown</td>
<td>Phase II study underway</td>
<td>2019</td>
<td>No</td>
</tr>
<tr>
<td>Vicinium (VB4-845)</td>
<td>16% CR at 12 months</td>
<td>No</td>
<td>Unknown</td>
<td>Phase III study underway</td>
<td>2019</td>
<td>No</td>
</tr>
<tr>
<td>Theralase (TLD-1433)</td>
<td>CR = 33% at 9 months CR = 33% at 12 months</td>
<td>No</td>
<td>Yes</td>
<td>Phase II study to commence 2Q2019</td>
<td>2021</td>
<td>Maybe</td>
</tr>
<tr>
<td>PD-1 / PD-L1 checkpoint inhibitors (atezolizumab, durvalumab, nivolumab, and pembrolizumab)</td>
<td>Overall Response Rate (&quot;ORR&quot;) = 28% in patients who have PD-L1 expression</td>
<td>Yes</td>
<td>Up to $USD 300,000</td>
<td>Approved for patients with metastatic and locally-advanced bladder cancer. Not approved for NMIBC. FDA halted 2 studies for decreased patient survival with low expression levels of PD-L1 versus platinum-based chemotherapy.</td>
<td>2023</td>
<td>No</td>
</tr>
<tr>
<td>Recombinant adenovirus (Interferon α2b (rAd-IFN))</td>
<td>35% Relapse-Free Survival (&quot;RFS&quot;) at 12 months for high grade tumours (CIS population ?)</td>
<td>Yes</td>
<td>Unknown</td>
<td>Phase III study to commence</td>
<td>Unknown</td>
<td>Maybe</td>
</tr>
</tbody>
</table>

22 2018 Review of available published clinical studies and US FDA information by Theralase
### Approximate Timing

<table>
<thead>
<tr>
<th>Event Description</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Canada Clinical Trial Authorization (“<strong>CTA</strong>”), Investigational Testing Authorization (“<strong>ITA</strong>”) and Clinical Site Review Ethics Board (“<strong>REB</strong>”) Approval to Commence Enrolling and Treating Patients in Canada</td>
<td><strong>2Q2019</strong></td>
</tr>
<tr>
<td>FDA Investigational New Drug (“<strong>IND</strong>”) and European IND Approval to Commence Enrolling and Treating Patients in the United States and Europe</td>
<td><strong>3Q2019</strong></td>
</tr>
<tr>
<td>Enroll, Treat and Follow-Up Approximately 100 NMIBC Patients in Canada, the United States and Europe</td>
<td><strong>2Q2019 to 4Q2021</strong></td>
</tr>
</tbody>
</table>
Phase IB NMIBC RESULTS
# Phase Ib NMIBC Clinical Study Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary</strong></td>
<td></td>
</tr>
<tr>
<td>Safety and tolerability</td>
<td>Achieved in 3 patients treated at MRSD at 90 and 180 days, 1 patient treated at Therapeutic Dose at 90 and 180 days, 1 patient treated at Therapeutic Dose at 90, 180, 270 and 360 days</td>
</tr>
<tr>
<td>Pharmacokinetics</td>
<td>Achieved in 3 patients treated at MRSD at 90 and 180 days, 1 patient treated at Therapeutic Dose at 90 and 180 days, 1 patient treated at Therapeutic Dose at 90, 180, 270 and 360 days</td>
</tr>
<tr>
<td>Efficacy</td>
<td>Achieved in 3 patients treated at MRSD at 90 days</td>
</tr>
<tr>
<td></td>
<td>Achieved in 3 patients treated at Therapeutic Dose at 90 days</td>
</tr>
<tr>
<td></td>
<td>Achieved in 0 patients treated at MRSD at 180 days</td>
</tr>
<tr>
<td></td>
<td>Achieved in 1 patient treated at Therapeutic Dose at 180 and 270 days</td>
</tr>
<tr>
<td></td>
<td>Achieved in 1 patient treated at Therapeutic Dose at 180, 270 and 360 days</td>
</tr>
<tr>
<td></td>
<td>1 patient treated at Therapeutic Dose withdrawn from Study due to metastatic disease</td>
</tr>
<tr>
<td><strong>Exploratory</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 Patients Evaluated at Maximum Recommended Starting Dose (&quot;MRSD&quot;) (0.35 mg / cm²)</td>
</tr>
<tr>
<td></td>
<td>3 Patients Evaluated at Therapeutic Dose (0.70 mg / cm²)</td>
</tr>
</tbody>
</table>
# Primary Objective Results: Adverse Events (Patients 001-006)

<table>
<thead>
<tr>
<th>Condition / Patient</th>
<th>001-001</th>
<th>001-002</th>
<th>001-003</th>
<th>001-004</th>
<th>001-005</th>
<th>001-006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bladder Spasms</td>
<td>2 – Moderate (resolved @ day 6); 1 – Mild on day 91 (resolved @ day 91)</td>
<td>2 – Moderate (ongoing @ end of study)</td>
<td>nil</td>
<td>nil</td>
<td>1 – Mild (resolved @ day 2)</td>
<td>nil</td>
</tr>
<tr>
<td>Constipation</td>
<td>1 – Mild (resolved @ day 5)</td>
<td>1 – Mild (resolved @ day 6)</td>
<td>nil</td>
<td>1 – Mild (resolved @ day 3)</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>Urge Incontinence</td>
<td>2 – Moderate (resolved @ day 6)</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
<td>2 – Moderate (resolved @ day 17)</td>
<td>2 – Moderate (ongoing @ day 180)</td>
</tr>
<tr>
<td>Fatigue</td>
<td>2 – Moderate (onset day 11, ongoing at end of study)</td>
<td>1 – Mild (ongoing @ end of study)</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
<td>1 – Mild (ongoing @ day 60)</td>
</tr>
<tr>
<td>Urinary Frequency</td>
<td>nil</td>
<td>1 – Mild (resolved @ day 22)</td>
<td>1 – Mild (resolved @ day 6)</td>
<td>2 – Moderate (ongoing at end of study)</td>
<td>2 – Moderate (resolved @ day 17)</td>
<td>2 – Moderate (ongoing @ day 180)</td>
</tr>
<tr>
<td>Hematuria</td>
<td>nil</td>
<td>1 – Mild (onset @ day 61, resolved @ day 168)</td>
<td>nil</td>
<td>1 – Mild (ongoing at end of study)</td>
<td>1 – Mild (resolved @ day 17)</td>
<td>1 – Mild (resolved @ day 26)</td>
</tr>
<tr>
<td>Pain</td>
<td>Pelvic: 1 – Mild (ongoing @ End of study)</td>
<td>Joint: 2 – Moderate (onset @ day 13, resolved @ day 57)</td>
<td>Low back: 1 – Mild (onset @ day 61, ongoing end of study)</td>
<td>Pelvic: 2 – Moderate (resolved @ day 6)</td>
<td>Eye: 1 – Mild (resolved @ day 1)</td>
<td>Right flank pain: 1 – Mild (onset @ day 2, resolved @ day 14)</td>
</tr>
<tr>
<td>Penile discomfort</td>
<td>1 – Mild (onset @ day 79, resolved @ day 84)</td>
<td>nil</td>
<td>1 – Mild (resolved @ day 5)</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>Urinary Urgency</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
<td>2 – Moderate (ongoing at end of study)</td>
<td>2 – Moderate (resolved @ day 17)</td>
<td>1 – Mild (onset @ day 38, resolved @ day 40)</td>
</tr>
<tr>
<td>Other</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
<td>Nocturia: 1 – Mild (onset @ day 170, ongoing at end of study)</td>
<td>nil</td>
<td>Dry skin: 1 – Mild (onset @ day 79), 2 – Moderate (ongoing @ Day 180)</td>
</tr>
</tbody>
</table>

Clinical Data collected by Princess Margaret Cancer Centre, University Health Network from Phase Ib NMIBC Clinical Study, 2017-2018
Secondary Objective Results: Pharmacokinetics of TLD-1433 (Patients 001-006)

Data points represent average TLD-1433 concentrations per ml of samples (mean +/- standard deviations)

TLD-1433 is predominantly removed from the body via urine within 24 hours and via plasma within 72 hours

Clinical Data collected by Princess Margaret Cancer Centre, University Health Network from Phase Ib NMIBC Clinical Study, 2017-2018
# Exploratory Efficacy Results (180 Day Cystoscopy Analysis) 
(Patients 001-006)

<table>
<thead>
<tr>
<th>Subject</th>
<th>001-001</th>
<th>001-002</th>
<th>001-003</th>
<th>001-004</th>
<th>001-005</th>
<th>001-006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathology (180 Days)</td>
<td>T1 HG w/ Cis</td>
<td>T1 HG w/Cis</td>
<td>Cis</td>
<td>T1 HG w/ Cis (indeterminate for involvement of muscularis propria)</td>
<td>No clinical evidence of bladder tumour</td>
<td>No clinical evidence of bladder tumour</td>
</tr>
<tr>
<td>Imaging (180 Days)</td>
<td>Increased lymphadenopathy, Generalized bladder wall thickening, and dilation of the right greater than left ureter again seen. Again noted is an area of ureteric thickening and narrowing on the right side</td>
<td>Solid mass in the right renal pelvis has enlarged in the interval</td>
<td>No definite evidence for abdominal pelvic disease. Plaque-like areas of calcification in the posterior bladder wall grossly similar</td>
<td>1) Recurrence of bladder cancer with worsening bilateral hydroureteronephrosis 2) Vertebral metastases 3) Focus of density within the left upper pole renal calyx is likely intra-pelvis urothelial malignancy</td>
<td>No evidence of metastatic disease in the abdomen or pelvis.</td>
<td>360 Day Cystoscopy: No clinical evidence of bladder tumour</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>270 Day Cystoscopy: No clinical evidence of bladder tumour</td>
</tr>
</tbody>
</table>

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23 Clinical Data collected by Princess Margaret Cancer Centre, University Health Network from Phase Ib NMIBC Clinical Study, 2017-2018
Phase II NMIBC Clinical Study Objectives
Phase II NMIBC Clinical Study Objectives

PDT using Laser Light Activated TLD-1433 in BCG-Unresponsive Patient Population

100 Patients Evaluated at Therapeutic Dose (0.70 mg / cm²)

**Primary Efficacy**

Evaluated by Complete Response ("CR") in patients with Cis with or without resected papillary disease at 90 days post-treatment and duration of CR evaluated at 360 days (12 months) post-treatment.

Patient CR is defined as at least one of the following:
- Negative cystoscopy and negative (including atypical) urine cytology
- Positive cystoscopy with biopsy-proven benign or low-grade NMIBC and negative cytology
- Negative cystoscopy with malignant urine cytology if cancer is found in the upper tract or prostatic urethra and random bladder biopsies are negative

**Secondary Safety**

Evaluated by the incidence and severity of Adverse Events ("AEs") Grade 4 or higher that do not resolve within 360 days post-treatment; whereby:
- Grade 1 = Mild
- Grade 2 = Moderate
- Grade 3 = Severe
- Grade 4 = Life-threatening or disabling
- Grade 5 = Death

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24 Theralase Phase II NMIBC Clinical Study design submitted to Health Canada in 3Q2018 and to be submitted to the FDA for regulatory approval in 4Q2018
Overall Study Design and Plan

Theralase Phase II NMIBC Clinical Study design submitted to Health Canada in 3Q2018 and to be submitted to the FDA for regulatory approval in 4Q2018.
## Approximate Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase II NMIBC Study Drug Manufacture and Packaging</td>
<td>3.0</td>
</tr>
<tr>
<td>Phase II NMIBC Study Device Manufacture and Packaging</td>
<td>3.0</td>
</tr>
<tr>
<td>Clinical Research Organization / Regulatory Approval</td>
<td>2.5</td>
</tr>
<tr>
<td>Phase II NMIBC Clinical Study</td>
<td>6.5</td>
</tr>
<tr>
<td>Working Capital</td>
<td>5.0</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>20.0</strong></td>
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### Common Share Purchase Warrants Outstanding

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<th>Quantity</th>
<th>Exercise Price</th>
<th>Value</th>
<th>Expiry Date</th>
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<td>19,071,940</td>
<td>$0.54</td>
<td>$10,298,848</td>
<td>07-Mar-20</td>
</tr>
<tr>
<td>3,159,000</td>
<td>$0.30</td>
<td>$947,700</td>
<td>14-May-20</td>
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<tr>
<td>3,165,008</td>
<td>$0.50</td>
<td>$1,582,504</td>
<td>03-Oct-20</td>
</tr>
<tr>
<td>4,095,457</td>
<td>$0.50</td>
<td>$2,047,729</td>
<td>09-Jan-21</td>
</tr>
<tr>
<td>7,198,599</td>
<td>$0.375</td>
<td>$2,699,475</td>
<td>06-Nov-21</td>
</tr>
<tr>
<td><strong>36,690,004</strong></td>
<td></td>
<td><strong>$17,576,256</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Common Shares

- **Undiluted**: 144,132,042
- **Fully Diluted**: 186,657,046
Summary

Significant Annual Revenue Potential on Successful Canadian, American and/or European Regulatory Approval

Estimated 3 Year Time Horizon to Complete Phase II NMIBC Clinical Study

Potential to Expand into Other Cancer Conditions
Appendix
Sponsor Representatives

Shawn Shirazi, Ph.D. Pharmacology - Chief Executive Officer – Drug Division
• 20+ years of hands-on experience in: pharmaceutical drug formulation and development, clinical trial management, good manufacturing practices international drug manufacture, international regulatory guidelines and quality assurance.
• Previous senior roles: Executive Director and Vice President of Research and Development - Torpharm Inc (Division of Apotex), Senior Director Global Research and Development - Perrigo Company and Chief Operating Officer (North America) - Daxinganling Lingonberry Boreal Biotech Co. Ltd.

Kipton Lade, B.Sc., M.Sc., MBA - Chief Executive Officer – Device Division
• 25+ years of global experience developing and launching new medical devices, through the execution of strategic sales and marketing plans. Mr. Lade holds degrees in Biomedical Engineering, Electrical Engineering and a Masters in Business Administration.
• Previous senior roles: President and CEO - Thornhill Medical, Director of Sales and Marketing - Boston Scientific Canada, General Manager - Alvimedica, Managing Director - Biotronik, General Manager - St. Jude Medical Canada and Director of Global Product Marketing - St. Jude Medical USA.

Arkady Mandel, M.D., Ph.D., D.Sc. - Chief Scientific Officer
• One of the key founders of the therapeutic use of lasers in dermatology and other areas of clinical medicine
• Over 100 original papers and scientific monographs to his name, combined with over 200 international patents
• Earned his designation as a medical doctor from the Moscow State Medical University
• Doctor of Science accreditation majoring in: biochemistry, microbiology, immunology, biophysics and photobiology
Sponsor Representatives

Kristina Hachey, PGA - Chief Financial Officer
- 17+ years of experience in finance and financing for public and private companies
- Chief Financial Officer of Theralase and Theralase Technologies Inc. since May 2004
- VP Finance of Kensington Capital Partners from April 1998 to May 2004
- Graduated from Ryerson University (Toronto, Ontario) with a bachelor degree in Business Management and Administration (1996), majoring in Accounting and Finance, minoring in International Business

Roger Dumoulin-White, P. Eng. - Director of Business Development
- Director of Business Development of Theralase Technologies Inc., since 2018
- President and CEO of Theralase Technologies Inc. 2004 to 2018 (Theralase Inc. 1994 to 2018)
- Before Founding Theralase Inc., from 1986 to 1994, served as a Product Team Manager with Ford Electronics Manufacturing Corporation, from a division of Ford Motor Corporation (NYSE:F), where he managed a $40 million a year business (subset of $400 million annual business), with approximately 400 direct and indirect employees reporting to him (subset of 2,500 total employees)
- Graduated from the University of Western (London, Ontario) with a bachelor degree in Electrical Engineering in 1986
Medical and Scientific Advisory Board ("MSAB")

Michael Jewett, M.D.: (UHN) (Chair of MSAB)
- Professor of Surgery (Urology) at the University of Toronto, Surgical Oncology at Princess Margaret Cancer Centre, University Health Network ("UHN")
- Clinical practice is in urologic oncology with research interests in testicular cancer and superficial bladder cancer

Lothar Lilge, Ph.D.: (UHN)
- Professor in the Department of Medical Biophysics, University of Toronto and Senior Scientist at the Ontario Cancer Institute, UHN
- Research is focused on Photo Dynamic Therapy, optical diagnostics, destruction of cancer and bacteria by light activated PDCs and the use of light as a microscopic tool for biomedical research

Ashish Kamat, M.D.: (MD Anderson)
- Internationally recognized expert in urologic oncology and authority in the management of urologic cancers
- Expertise in bladder cancer, organ sparing and minimally invasive techniques. Maintains an active research portfolio with focus on efforts to develop novel therapies and identify predictors of response to therapy (i.e.: intravesical immunotherapy), as a first step towards personalized cancer therapeutics.
- Initiated, led and active in several large studies including multinational trials in bladder cancer, findings published in high impact journals
Medical and Scientific Advisory Board (Cont’d)

Michael O’Donnell, M.D.: (University of Iowa)
- Uro-oncologist
- Long history of focusing on bladder immunology and bladder cancer immunotherapy, particularly the anti-cancer mechanisms of bacillus Calmette-Guerin (“BCG”) and its enhancement with combination therapies
- Recently headed a national trial of bladder cancer treatment utilizing BCG plus interferon (a natural protein which induces healthy cells to combat disease) comprised of over 1,000 patients and holds several U.S. patents for his work

Brian Wilson, Ph.D.: (UHN)
- Senior Scientist and Head of the Applied Biophotonics group at UHN
- Professor in the Department of Medical Biophysics at the University of Toronto
- Research focus of the Applied Biophotonics group is the development and application of new therapeutic and diagnostic techniques based on the use of lasers and other optical technologies
Publications to Date

Kalinina, Sviatlana; Breymayer, Jasmin; Reess, Kirsten; et al. *Correlation of intracellular oxygen and cell metabolism by simultaneous PLIM of phosphorescent TLD1433 and FLIM of NAD(P)H* Journal of biophotonics Pages: e201800085: 2018

Kaspler, Pavel; Lazic, Savo; Forward, Sarah; et al. *A ruthenium(II) based photosensitizer and transferrin complexes enhance photo-physical properties, cell uptake, and photodynamic therapy safety and efficacy* PHOTOCHEMICAL & PHOTOBIOLOGICAL SCIENCES 15:481-495: 2016


# Capitalization Table*

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Basic Shares Outstanding</td>
<td>144,132,042</td>
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<td>Warrants</td>
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<td>Options</td>
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<td>Fully Diluted Shares Outstanding</td>
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<td>Insider Ownership</td>
<td>7.9% (12.2% fully diluted)</td>
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* As of March 25, 2019